Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks	)	EB Docket No. 06-119

REPLY COMMENTS OF

TELECOMMUNICATIONS FOR THE DEAF AND HARD OF HEARING, INC.;
AMERICAN ASSOCIATION OF PEOPLE WITH DISABILITIES;
ASSOCIATION OF LATE-DEAFENED ADULTS;
CALIFORNIA COALITION OF AGENCIES SERVING THE DEAF AND HARD OF HEARING;
DEAF & HARD OF HEARING CONSUMER ADVOCACY NETWORK; AND
NATIONAL ASSOCIATION OF THE DEAF

Dated: August 21, 2006

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Telecommunications for the Deaf and Hard of Hearing, Inc. ("TDI"), through its undersigned counsel; American Association of People with Disabilities ("AAPD"); Association of Late-Deafened Adults ("ALDA"); California Coalition of Agencies Serving the Deaf and Hard of Hearing ("CCASDHH"); Deaf & Hard of Hearing Consumer Advocacy Network ("DHHCAN"); and National Association of the Deaf ("NAD," and collectively, "Commenters") hereby submit their Reply Comments to the Notice of Proposed Rulemaking ("*NPRM*") in the above-referenced proceeding, seeking comment on the recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks ("Independent Panel").[1]

[1] *Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks*, EB Docket No. 06-119, Notice of Proposed Rulemaking, FCC

I. INTRODUCTION

TDI is a national advocacy organization actively engaged in representing the interests of the roughly thirty-one (31) million Americans who are deaf, hard of hearing, late-deafened, and deaf-blind. TDI's mission is to promote equal access to broadband, media and telecommunications for the aforementioned constituency groups through consumer education and involvement, technical assistance and consulting, application of existing and emerging technologies, networking and collaboration, uniformity of standards, and national policy development and advocacy.

AAPD is the largest national nonprofit cross-disability member organization in the United States, dedicated to ensuring economic self-sufficiency and political empowerment for the more than 51 million Americans with disabilities. AAPD works in coalition with other disability organizations for the full implementation and enforcement of disability nondiscrimination laws, particularly the Americans with Disabilities Act (ADA) of 1990 and the Rehabilitation Act of 1973, as well as other statutes, such as the disability accessibility mandates in the Communications Act.

Formed in Chicago, Illinois in 1987, ALDA works collaboratively with other organizations around the world serving the needs of late-deafened people. Through its chapters and groups around the country, ALDA promotes public and private programs designed to alleviate the problems of late-deafness and for reintegrating late-deafened adults into all aspects of society. ALDA also provides educational information concerning issues affecting late-deafened adults, as well as advocacy on behalf of, and support for, late-deafened adults and their families and friends.

06-83 (Rel. June 19, 2006)("*NPRM*").

CCASDHH consists of eight community-based nonprofit agencies providing various social services to deaf and hard-of-hearing Californians – Deaf Counseling, Advocacy and Referral Agency; Greater Los Angeles Agency of Deafness, Northern California Center on Deafness, Deaf and Hard of Hearing Service Center; Orange County Deaf Equal Access Foundation; Tri-County GLAD; Center on Deafness – Inland Empire, and Deaf Community Services of San Diego.

Established in 1993, DHHCAN serves as the national coalition of organizations representing the interests of deaf and hard of hearing citizens in public policy and legislative issues relating to rights, quality of life, equal access, and self-representation. DHHCAN also provides a forum for proactive discussion on issues of importance and movement toward universal, barrier-free access with emphasis on quality, certification, and standards.

Established in 1880, NAD is the nation's oldest and largest consumer-based national advocacy organization safeguarding the civil and accessibility rights of deaf and hard of hearing people in the United States of America. Policy and legislative issues addressed by NAD cover a broad range of areas, including education, employment, health care, human services, rehabilitation, telecommunications, and transportation.

The Commenters have been active in various Commission proceedings related to emergency services which impact deaf and hard of hearing people, e.g. *Review of the Emergency Alert System*, EB Docket No. 04-296. We agree with other commenters in this proceeding that much of the Commission's inquiry can be, and is, addressed in that other proceeding.[2] However, the Commenters have taken lessons from the Katrina disaster that they would like to emphasize in these Reply Comments. They do not comprise the full panoply of recommendations that the

[2] *See* Sprint Nextel Comments at 20; Verizon Comments at 27.

Commenters advocate in regard to EAS, but instead are directed at Katrina-type emergencies of devastating scope in which normal access to EAS services, even if designed to accommodate deaf and hard of hearing people, is disrupted.

II. INDEPENDENT PANEL REPORT

The Independent Panel made the following recommendations in regard to disabled persons:

> a. Promptly find a mechanism to resolve any technical and financial hurdles in the current EAS to ensure that non-English speaking people or persons with disabilities have access to public warnings, if readily achievable.
>
> b. Work with the various industry trade associations and the disabled community to create and publicize best practices for serving persons with disabilities and non- English-speaking Americans.
>
> c. Encourage state and local government agencies who provide emergency information (through video or audio broadcasts or websites) to take steps to make critical emergency information accessible to persons with disabilities and non- English-speaking Americans.[3]

In the *NPRM*, the Commission asked if this was sufficient, or if other measures are required.[4] The Commenters believe that other measures are indeed required. The Independent Panel's recommendations, while thoughtfully considered, are only aspirational. They do not suggest tangible action and rely, in the Commission's words, on "voluntary consensus recommendations."[5] As we discuss below, there are more tangible steps that the Commission can and should take in order to ensure that deaf and hard of hearing Americans receive all emergency information.

[3] *NPRM* para. 7.
[4] *Id.*
[5] *Id.*

There are 31 million Americans with some degree of hearing loss. The number is rising dramatically with the aging of the baby boomers, and is expected to reach *78 million* by 2030.[6] Thus, top priority must be given to the need for effective communication of information to people who are deaf and hard of hearing. In an emergency situation, a deaf and hard of hearing person, like any other individual, must have many options for communication. If one option proves ineffective or unworkable in conveying emergency information, emergency personnel should be prepared with readily available and accessible communication alternatives.

People with hearing loss use many strategies and tools for communication. Katrina disrupted those strategies and took away many tools. For example:

- Katrina brought humidity, heavy rain, flooding and perspiration due to high temperatures. All of these are enemies of hearing aids and cochlear implants because moisture can invade their circuitry and disable the device. As a result, many people became heavily dependent on visual information. Unfortunately, Katrina also disrupted the power and telecommunications services that many visual displays rely on, further exacerbating this problem.

- Because of the widespread power outages and loss of telecommunications, it was difficult or impossible to reach the professionals who provide visual information through interpreting, transliteration, and translation of spoken words to text.

- Katrina cut off people who were are deafblind from their support service providers, who facilitate communication, provide visual and auditory information, and act as sighted guides.

At a minimum, Katrina reinforced 1) the critical need for additional redundancy to ensure effective communication during preparation, notification, response, and recovery; 2) the need to develop a visually accessible communication system that can operate with off-the-shelf batteries; and 3) the need to better equip shelters and train providers to ensure effective communication with deaf and hard of hearing evacuees.

[6] *See* Newsweek, "A Little Bit Louder, Please," by David Noonan, June 6, 2005.

III. BROADCASTING

A. Television

When alerted to a potential emergency, people with hearing loss tend to first turn to their televisions to get more information. However, many television stations did not provide visual information, or provided insufficient information, to convey the gravity of the situation and what actions should be taken. Commission regulations requiring this information have been in effect for years, and the FCC has sent broadcasters several reminders of their obligations. On September 9, 2005[7] (prompted by Katrina-related complaints from consumers), and on July 20, 2006,[8] the FCC issued yet another reminder.

Deaf and hard of hearing people were frustrated that they could get news about Katrina on national news program broadcasts that were captioned, but could not find out what was happening in their own towns through local newscasts. For example, in Mississippi they weren't given important information such as the need to boil or treat water. And in Lafayette, Louisiana, there were times when the only visual information a local TV station provided was scrolling captions with phone numbers to call and a list of closed roads. Even when information was visually presented, it was often devoid of clarifying details that were available to those who could also hear. These include information like:

- What resources will someone get by calling the phone numbers, and what are the hours the numbers are staffed?
- What exact sections of the roads are affected?
- What are alternate routes?
- What is the anticipated length of the closures?

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[7] *Reminder To Video Programming Distributors Of Need To Make Emergency Information Regarding Hurricane Katrina Evacuation And Relief Efforts Accessible To Persons With Hearing Or Vision Disabilities*, Public Notice, DA 05-2438 (Sep. 9, 2005).

[8] *Reminder to Video Programming Distributors of Obligation to Make Emergency Information Accessible to Persons with Hearing or Vision Disabilities*, Public Notice, DA 06-1483 (July 20, 2006)(*clarified*, Public Notice, DA 06-1600 (Aug. 7, 2006).

Broadcasters should ensure that they can meet their captioning obligations, even in emergency situations in which their usual captioning personnel might be unavailable. For example, they should establish contracts or cooperative agreements among captioning providers to caption broadcasts in the event of emergencies regardless of the emergency's location, and these captioning providers should be designated as essential personnel in the context of emergency

response. If these captioning providers are offsite, there should be plans ensuring that transmission of captions will not be interrupted or lost, i.e. backup power, satellite links, etc.

In those situations where a live stenographer is simply not available, there are options that broadcasters can explore for backup use. As an example, there are products such as "Caption Mic,"[9] that provide broadcasters with an internal capability that uses automatic speech recognition as the means for generating real-time captions. While not capable of interpreting the speech of the on-air talent, the PC-based system can interpret the repeated speech of an on-site person who has trained the system to recognize their voice to generate captions. While the error rate may not be up the standards of a live stenographer, automatic speech recognition systems may still be acceptable on an emergency basis, if there is no other option and errors are immediately caught and corrected. According to the manufacturer, the Caption Mic system is available for under $5,000.

Few manufacturers have placed a convenient button on the front of their television sets or on the television's remote control to instantly activate or deactivate closed captions. Instead, there are often several layers of menus to go through before captions can be viewed, and a television may reset to noncaptioning mode whenever it is turned off. The Commission should

[9] ULTECH LLC, Middlebury, Connecticut (www.ultech.com/products).

modify its captioning rules to require single button access to captioning features (similar to the "Subtitle" button on most DVD player remotes.) This can save precious seconds that are lost to activating the captions, and has the added advantage of being readily available to people who have temporary hearing loss due to illness or noisy surroundings and are not familiar with the operation of the television set, or do not remember how to activate the captions. The Commission has such authority under Section 330(b) of the Communications Act,[10] which directs the Commission to prescribe rules pursuant to Section 303(u) of the Communications Act[11] that "provide performance and display standards for such built-in decoder circuitry" and, as new video technology is developed, "take such action as the Commission determines appropriate to ensure that closed-captioning service continues to be available to consumers."[12]

Deaf and hard of hearing people also have been extremely vocal about their dissatisfaction with pre-scripted captions used on many news programs. Except in the country's top 25 markets, regulations do not require real-time captions, which are meant to provide word-for-word text of everything that is spoken. News programs using pre-scripted captions typically provide only some of the information and captions are often not synchronized with what viewers see on the screen. No information or very sketchy details are usually provided for breaking news and on-the-spot coverage from other locations – the very things most desired in preparing for emergencies, during emergencies, and following emergencies. Without word-for-word accounts, the context of information or crucial details may be lost. The FCC should revise its rules to

[10] 47 U.S.C. § 330(b).

[11] 47 U.S.C. § 303(u)("[The Commission shall] [r]equire that apparatus designed to receive television pictures broadcast simultaneously with sound be equipped with built-in decoder circuitry designed to display closed-captioned television transmissions when such apparatus is manufactured in the United States or imported for use in the United States, and its television picture screen is 13 inches or greater in size.")

[12] 47 U.S.C. § 330(b).

require real-time captioning during periods of emergency alerts, and that all audio announcements are broadcast with a simultaneous text display. It should also clarify or expand its regulations on visual presentation of emergency information to include such examples as airport closings, new security measures, changes in homeland security threat levels, instructions on filing for disaster relief, where to get information on survivors, mental health services in aftermath of disasters, etc.

For further guidance on this issue, the Commenters suggest that the Commission refer to the attached "Best Practices Guide" for access to emergency video programming through captioning, created through a collaborative effort by consumers, government officials and broadcasters in Virginia in June 2004.[13]

B. Radio

Surveys and correspondence since September 11, 2001 have shown an increasingly strong desire by deaf and hard of hearing people for widespread deployment of text radio. The vision of text radio in a personal vehicle would have the radio turn on when an emergency message is being broadcast, and ideally provide visual and 500 Hz auditory alerts to command attention to it. A display would show the complete text of the audio report. Through a global positioning system or terrestrial location finding in the vehicle, broadcasts of an emergency nature for the area in which the occupant is traveling would automatically be routed to the vehicle.

For decades before September 11, people who are deaf and hard of hearing spoke of the desire for text radio to have access to news. At present, there is little that a deaf or hard of

[13] Access to Emergency Video Programming Through Captioning in Virginia: A Best Practices Guide for Broadcasters, Consumers Who are Deaf or Hard of Hearing, and the Virginia Department for the Deaf and Hard of Hearing (attached as Exhibit 1).

hearing person can do to communicate while in transit – phones, e-mail, radio and TV are either unavailable or unusable. One reason often cited in the desire for text radio is to be able to get information while driving, particularly in situations where there are traffic delays or emergency road closings and detours.

Captioning a radio broadcast can be done just as it is done for television. The British Broadcasting Corporation (BBC) is now making a scrolling text service for the latest headline news to those who have digital radio, with content refreshed every 20 seconds, 24 hours a day.[14] Already, Radio Data System (RDS) allows text information to be sent over an FM radio signal. It is currently used in the U.S. (where it is often referred to as Radio Broadcast Data System, or RBDS) to display the station's call letters, the name of a song being played, weather reports, stock quotes, sports scores, and other information.[15] Clear Channel Communications, Entercom, Infinity Broadcasting, Cumulus Media and some smaller broadcasters have RDS capability at some of their stations. The technology is widely used in Europe to provide traffic information. The Toyota Prius and some other vehicles have screens that can display RDS.

The Commission should provide for a full Radio Broadcast Data Service (RBDS)/captioned radio system with the ability to send emergency text messages to radio and other displays, and require that all new vehicles available with displays having the ability to show Radio Data Services, receive emergency broadcasts, and generate visual and auditory alerts to the emergency.

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[14] This service is available on Digital Audio Broadcasting and is a partnership between BBC and Unique Interactive.

[15] As a possible example, on August 9, 2006, some listeners to Kojo Nnamdi's show on WAMU-FM, Washington, D.C., were able to receive captions of his interview with Gallaudet University's Dr. I. King Jordan and Dr. Jane Kelleher Fernandes on their car radio displays. Although the Commenters presume that this was done with RBDS, pursuant to an experimental authorization, they do not yet have all of details regarding how this was accomplished. However, this information will be provided later in an *ex parte* filing.

The Commenters also support the advice of other commenters (e.g. Association of Public Broadcasting Systems, MAEC) who suggested using some of the extra channels available to public digital TV and radio licensees to carry EAS messages. MAEC described a technology that can display up to 80 characters of text on radio receiver digital displays. While announcers are providing audio information to those on evacuation routes, this technology can use radio to deliver coordinated text information.[16] (NCTA vaguely supported the use of cable bandwidth for this purpose as well.[17]) To that end, the Commenters also urge the Commission to authorize the use of the (currently experimental) FM extended hybrid mode within the proposed HD Radio system.

APBS further described the concept of "datacasting," a one-way broadcast transmission of information in IP format. Datacasts are encoded within the digital television signal and then decoded by an inexpensive receiver that is easily hooked up to a personal computer, laptop or computer network. Reception can be achieved through a small portable antenna that sits on top of the PC (or laptop in the field), or users can receive the signal through a conventional rooftop TV antenna. The signal can also be instantly retransmitted over wireless and other networks.[18] The Commenters support this concept as well.

III. TEXT MESSAGING

The Commenters enthusiastically support the many commenters who discussed the obvious benefits of text messaging on mobile devices as a method of conducting an EAS, with

[16] Mississippi Authority for Educational Television Comments at 4.

[17] "Similarly, with respect to the accessibility of emergency alerts to persons with disabilities, EAS message originators should be urged to provide detailed information in both audio and visual format so that individuals with hearing and visual disabilities receive the same information. With regard to the Panel's urging that the Commission work with the various industry trade associations to create and publicize best practices for serving persons with disabilities or persons who do not speak English, we support such efforts." NCTA at 24.

[18] Association of Public TV Stations Comments at 4.

some focusing on its benefits for people who are deaf and hard of hearing. In particular, some commenters (e.g. American Association of Paging Carriers, Dye and Mercer) agreed with the Independent Panel's Report that paging systems were more reliable during the Katrina disaster than voice/cellular systems, and they further recommended it as an alternate communications channel and as a back-up solution for existing public safety communications systems.[19] The Commenters also approve of AAPC's suggestion of the possibility of paging devices built into smoke alarms or other household fixtures that would alert the hearing impaired.[20]

Examples of the usefulness of paging and SMS capable devices are compelling and poignant. In New York City on September 11th, many people were not able to use their digital wireless phones by voice due to network overloads, but the data network held up despite the demand. A deaf person who worked in a government office in Washington, D.C. with 100 hearing people said that because of his pager he was the first to know of the attacks on the World Trade Center and alerted the others. The pager worked better than cell phones immediately after the attacks. (It should be noted, however, that an hour or two later the pager stopped working for several hours.) A deaf systems designer for the Port Authority of New York and New Jersey, and another deaf employee, escaped from a cafeteria on the 43rd floor of the North Tower. After being thrown against a window by the first impact, she learned what had happened by sending a page to a friend on an AOL Mobile Communicator she had purchased months earlier. On her way down the stairs to escape the building, her pager vibrated constantly with messages from friends all over the world -- California, Maryland, Ireland, South Africa, and England -- asking if she was safe.

[19] Dye and Mercer Comments at 1- 4.
[20] American Association of Paging Carriers Comments at i.

Many paging and/or text messaging devices also enjoy the benefit of being powered by standard replaceable batteries. A supply of these batteries can be held in reserve for emergencies. This is greatly preferable to devices (like most cell phones) that use custom rechargeable batteries and must recharged from an AC power source that may well be dead.

Thus, it is imperative that the FCC ensure the allocation of sufficient spectrum for the provision of text information and messaging. One commenter, Dye and Mercer, made the specific recommendation that the FCC should permit private two-way paging systems to be licensed by public safety community in the 896-901/935-940 MHz band and incorporate paging technology into the EAS.[21] AAPC also commented on the need for changes to the spectrum licensing rules.[22]

IV. TELEPHONE

Telecommunications relay services allow people with hearing loss to make calls to, and receive calls from, standard telephone users by receiving the audio portion through text or sign language. In Louisiana and Mississippi, even when phone service was available, the phone numbers for relay users would not work for several days. This was a major concern for people who wanted to contact their friends and family to reassure them of their safety and inform them of their whereabouts. Thus, the Commission should require all TRS providers to have backup

[21] Dye and Mercer Comments at 5-6.

[22] "The Commission's spectrum allocation and licensing rules themselves pose substantial barriers to the deployment of two-way paging systems for emergency communications, as recommended by the Panel; and the Commission can and should promptly dismantle and eliminate those barriers. First, the Commission should modify its 'substantial service' policies governing Part 24 NPCS channels so that licensees leasing, disaggregating or partitioning NPCS spectrum for use by two-way paging systems for emergency communications, including leasing, disaggregating or partitioning spectrum for 'back haul' channels that can be paired with traditional 929/931 MHz paging channels, also will be deemed to be providing 'substantial service' on the spectrum retained by the NPCS licensee. Second, the Commission should permit two way paging systems to be licensed for emergency communications on a primary basis in the 896- 901/935-940 MHz band under Part 90 of the Commission's rules." American Association of Paging Carriers at ii.

power ready to operate for a minimum of 72 hours. It should also require that all TRS providers have contingency plans for transfer of calls from TRS centers that may be unable to operate due to catastrophic damage or overwhelming volume of calls from other centers.

It is also important that that all TRS personnel are deemed essential personnel during emergencies. On September 11, one person was unable to complete any TRS calls to her deaf husband all morning, although she could make TTY-to-TTY calls without any problem. This created a very stressful situation, as she and her husband were unable to communicate with their child's school to make arrangements to pick up their child. This situation occurred because the State of Maryland shut down all state offices, including the TRS office, on September 11, and because there was no back-up plan for operating TRS. Had they been considered essential personnel, this would likely not have happened.

One of the Independent Panel's recommendations was that the Commission work with the National Communications System to actively and aggressively promote GETS, WPS and TSP to all eligible government, public safety, and critical industry groups.[23] The Commenters recommend that these efforts be expanded further to include community based organizations. The Commenters learned from Katrina that the work of some nonprofit organizations, religious organizations, and educational entities was absolutely critical, as they provided food, clothing and shelter for victims, and also connected them with family members as well as assisting them in getting services for recovery. A good model of organizations that should qualify can be found in the list of those that belong to NVOAD (National Volunteer Organizations Active in Disaster).[24]

[23] Independent Panel Report at 36.
[24] www.nvoad.org.

The Independent Panel also recommended the designation of a secondary back-up PSAP that is more than 200 miles away to answer calls when the primary and secondary PSAPs are disabled.[25] The Commenters would like to emphasize that these backup PSAPs should be fully equipped and trained to handle various types of calls from deaf and hard of hearing individuals, including the many types of telecommunications relay calls. The Commenters therefore recommend that the Commission revise its rules regarding the operational standards for TRS providers[26] to require that they be able to access these back-up PSAPs.

The Commenters also approve of NENA's recommendation to IP-based solutions for EAS. NENA believes that an IP-enabled next generation 911 system will better accommodate those with hearing and speech disabilities. It will allow them to access the system directly via text devices and IP relay/video relay services, and also improve the ability for local/state government to directly notify them of emergencies as well.[27]

Like Americans in general, many deaf and hard of hearing consumers have begun to adopt wireless data communications and IP-enabled methods of relay and interpersonal communications. Just like hearing customers who rely only on VoIP or cell phones, many deaf people – probably a greater proportion than in the general population – have cancelled their telephone service. It is important that PSAPs recognize this and continue a process of transition to newer network technologies. For deaf and hard of hearing people, it is important that both direct and relayed methods of contacting PSAPs be supported. In addition, new PSAP systems should accommodate direct text contacts in all of their mechanics – including recording of

[25] Independent Panel Report at 39.
[26] 47 C.F.R. § 64.604(a)(4).
[27] NENA Comments at 10-11.

conversations, queuing of messages, etc. – and without special procedures by the PSAP responder.

V. CONCLUSION

The scope of the devastation wrought by Hurricane Katrina stressed much of the EAS system to an extent not contemplated before, and revealed many areas for improvement. Although great strides have been made in the last few decades for meeting the EAS needs of people who are deaf or hard of hearing, Katrina demonstrated that improvements need to be made to adequately meet their needs as well. The Commenters respectfully request the Commission to adopt the comments and recommendations herein.

Respectfully submitted,

/s/ Harry N. Malone

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Dated: August 21, 2006

Exhibit 1

Access to Emergency Video Programming Through Captioning in Virginia:
A Best Practices Guide for Broadcasters, Consumers Who are Deaf or Hard of Hearing, and the Virginia Department for the Deaf and Hard of Hearing

Access to Emergency Video Programming Through Captioning In Virginia:

A Best Practices Guide For Broadcasters, Consumers Who are Deaf or Hard of Hearing, and the Virginia Department for the Deaf and Hard of Hearing

June 2004

I. Background:

In April 2000, the Federal Communications Commission (FCC) issued an order relating to the accessibility of video programming to viewers with hearing disabilities. This order specifically stated the requirement for video programming distributors to provide a visual display of critical details of any emergency situation reported. [See Section VIII, Item ii.] Since that time, the FCC has issued four additional reminders of the requirements of this order.

During the 2003 session of the Virginia General Assembly, Delegate Karen Darner introduced HB 2570 relating to captioning of emergency broadcasts. Her request was made on behalf of deaf and hard of hearing constituents who expressed concerns about the quality and quantity of information presented in a visual format to alert the deaf and hard of hearing communities during the sniper incidents in October 2002. Specific consumer concerns related to the reporting of the sniper incidents included the apparent lack of a visual display of information related to roadblocks and suspect vehicles by some broadcasters. After meeting with representatives of the Virginia Department for the Deaf and Hard of Hearing (VDDHH), the State Police and the Virginia Association of Broadcasters, Delegate Darner recognized some challenges with the bill and withdrew it with the understanding that the concerned parties would work together to address the concerns of the consumers. VDDHH agreed to coordinate this effort.

Before the workgroup was convened, Virginia faced another emergency situation which heightened the anxiety of the deaf and hard of hearing communities and which re-emphasized the need to address the concerns: Hurricane Isabel hit Virginia with tremendous force, prompting broadcasters to devote significant airtime to critical information in advance of and after the storm. Once again, consumers who are deaf or hard of hearing expressed concerns that some broadcasters did not provide a visual display of critical details. During this situation, the Virginia Association of Broadcasters worked with VDDHH to get information and reminders to broadcasters in a timely manner. This was an important first step in developing ongoing procedures to address communication needs.

II. Workgroup Participants

The following individuals participated in the workgroup and offered valuable input to the process which resulted in this Guide:

Brenda Carper	VDDHH Advisory Board
Rhonda Jeter	Greater Richmond Chapter of Virginia Association of the Deaf (GRCVAD)
Bennie Lacks	Virginia Association of the Deaf (VAD)
Coe Ramsey	Virginia Association of Broadcasters (VAB)
Doug Easter	VAB
Sean Harper	WHSV-TV Harrisonburg
Vic Matsui	Self Help for Hard of Hearing (SHHH) and Williamsburg SHHH (WISHHH)
Harold Wright	WVIR-TV Charlottesville
Don Richards	WWBT TV Richmond VAB Board
Cheryl King	Federal Communications Commission (FCC)
Jenifer Simpson	FCC
Robert Kemmler	Virginia State Police
Cheryl Heppner	Northern Virginia Resource Center (NVRC) for Deaf and Hard of Hearing Persons
Ron Lanier	VDDHH Director
Leslie Hutcheson Prince	VDDHH Policy and Planning Manager

III. Purpose of this Guide:

A “best practice” can be defined as “An activity or procedure that has produced outstanding results in another situation and could be adapted to improve effectiveness, efficiency, ecology, and/or innovativeness in another situation.” (Interoperability Clearinghouse Directory of Terms. (N.D.). Retrieved February 3, 2004, from http://www.ichnet.org/glossary.htm.)This guide outlines the best practices recommended by the workgroup for broadcasters, consumers and the Virginia Department for the Deaf and Hard of Hearing to implement in addressing consumer access to critical information in emergency situations. This guide is intended:

1. To provide broadcasters with information and guidance on best practices in providing a visual display of critical details during an emergency situation.
2. To provide consumers with information and guidance on best practices for working with broadcasters in advance of, during and after emergency situations.

3. To provide the Virginia Department for the Deaf and Hard of Hearing with information and guidance on best practices for facilitating broadcasters and consumers in achieving communications access in emergency situations.
4. To provide broadcasters and consumers with resource information to assist in addressing issues associated with the visual display of critical details during an emergency situation and other issues of community/broadcaster relations.

The practices recommended in this guide are only suggested voluntary practices and do not carry the force of law, except as otherwise provided by the Federal Communications Commission. Broadcasters and consumers that elect to participate in the suggested practices which extend beyond FCC requirements and applicable state and federal laws shall not be liable to each other, the Commonwealth of Virginia, or any division or agency thereof, for any failures to comply with any provision in this Guide.

IV. The Ideal

The ideal, preferred and recommended BEST PRACTICE would be real-time captioning of all broadcasts that contain information of an emergency nature that is intended to further the protection of life, health, safety, or property with 100% accuracy, notwithstanding financial and technical limitations which may affect implementation.

V. Standard for Determining that a Situation Constitutes an Emergency

The Federal Communications Commission has included a broad definition of an emergency situation in its rule at 47 C.F.R §79.2. In this section, “Emergency information” is information, about a current emergency, that is intended to further the protection of life, health, safety, and property, i.e., critical details regarding the emergency and how to respond to the emergency. Examples of the types of emergencies covered include tornadoes, hurricanes, floods, tidal waves, earthquakes, icing conditions, heavy snows, widespread fires, discharge of toxic gases, widespread power failures, industrial explosions, civil disorders, school closings and changes in school bus schedules resulting from such conditions, and warnings and watches of impending changes in weather. The rule further notes that critical details “include, but are not limited to, specific details regarding the areas that will be affected by the emergency, evacuation orders, detailed descriptions of areas to be evacuated, specific evacuation routes, approved shelters or the way to take shelter in one's home, instructions on how to secure personal property, road closures, and how to obtain relief assistance.” In its guidance documents on the rule, the FCC notes that “[in] determining whether particular details need to be

presented visually and aurally, programmers may rely on their own good faith judgments. There could be a limited number of instances when an emergency affects the broadcast station or non-broadcast network or distributor and it may be impossible to provide accessible emergency information."

The FCC's most recent reminder of the requirement to provide a visual display of critical information in an emergency has further clarified that the Fall 2002 sniper shootings meet the definition of "emergency" and that the regulation is also intended to apply to terrorism-related emergencies.

Consumers in the workgroup have asked that broadcasters look beyond the current FCC definitions and make non-emergency information visually accessible when such information is provided during an interruption of regular programming.

This standard recognizes that, on occasion, broadcasters may interrupt regular programming with reports on situations which do not threaten the life, health or safety of citizens. By ensuring that ALL interruptions for special reports include a visual presentation of critical information, broadcasters can ensure that citizens who are deaf or hard of hearing are not unnecessarily concerned that individual health or safety is in danger.

In an ever changing world where inconceivable actions become real emergencies, broadcasters and consumers should work together to determine what constitutes an emergency in their community and how to determine whether a situation rises to the level of an emergency. As a starting point, see the recommendations of the consumer members of the work group re types of situations needing coverage, types of information needing coverage following an emergency, and types of broadcasts that could potentially contain emergency information. These recommendations are contained in Attachment A.

VI. Best Practices for Broadcasters

a. Standardize placement of captions and crawls to prevent either from blocking the other**,** as required by FCC regulation**.**

b. Err on the side of providing a visual display which includes too much information during situations which meet the standard for an emergency.

c. Be prepared to provide the following information in a full-screen or other format:

   i. Is there a current or impending danger to any person in the broadcast viewing area?
   ii. What is the nature of the emergency?
   iii. What do individuals in the viewing area need to do?
   iv. Where is the emergency? What are the boundaries of the affected area?
   v. What is the expected/known duration and/or severity of the emergency?
   vi. What are the real or potential impacts on personal health, safety, travel, schools, electricity and telephone service?

d. Provide a display of the key points made by public officials during an emergency situation. If no advance notice of the content of the officials' live comments is available to the broadcaster, the broadcaster should be prepared to provide a full screen display of the key points as soon as possible after the officials' appearance.

e. Establish a unique and understandable marker for broadcasts or crawls which provide information related to an emergency situation. This can be achieved on a market-by-market level based on broadcasters consulting with the local community to determine what will be most effective in consideration of the technology available in each market.

f. Welcome and work towards a working relationship with the local deaf and hard-of-hearing communities before emergency situations arise.
   i. Identify a single staff member to serve as a liaison to develop and maintain this working relationship. The Broadcaster to Community Liaison (BCL) must be someone with the authority to make on-air changes (producer-level).
   ii. The BCL should invite members of the local deaf and hard of hearing communities to participate in an initial meeting to establish a Deaf and Hard of Hearing Consumer Advisory Group or respond to the community's request for the same.
      1. In determining who to invite to participate in this initial meeting, the Broadcaster should contact VDDHH, the Virginia Association of the Deaf and state coordinator for Self Help for Hard of Hearing People, Inc.
      2. The BCL should be prepared to receive and respond to immediate, direct and regular contact with the Community to Broadcaster Liaison (Chair of the Advisory Group – see "Best Practices for Consumers").
      3. The BCL should work with the CBL to establish agreed upon protocols for reporting problems, discussing solutions and sharing related information with the community.
      4. The BCL should host a post-situation debriefing of the Deaf and Hard of Hearing Consumer Advisory Group after situations which meet the standard for an

emergency to discuss what worked and what did not work.

g. Explore options for a standing contract for Real-Time Captioning for Emergency Situations.
  - **i.** Such a contract would allow stations to ensure immediate real-time captioning of broadcast information.
  - **ii.** A sample contract description is included in the Resources section of this guide.

h. Establish some pre-programmed critical details-type information in anticipation of various situations. This could include templates for information related to road closures, school closures, affected areas, emergency contacts (including TTY numbers) and other information typically provided in emergency situations.

i. In consultation with the local deaf and hard of hearing communities, standardize the technical aspects of all captioned information. Specifically, establish technical standards for crawl speed, lines of text, appearance, and timing of switches to ensure that captions are not dropped.

j. Provide regular training to on-air and production staff on topics including but not limited to:
  - **i.** FCC requirements for communications access
  - **ii.** Community Awareness – understanding and reaching the Deaf and Hard of Hearing communities.

k. Be aware of advances in caption related technology.

l. Be responsive to community requests to host events, such as Open House events or community relations workshops for the Deaf and Hard of Hearing Communities.

m. Monitor the quality of captions and the appropriate, consumer-friendly display of visual information during and after emergency situations.

n. Provide a separate TTY-accessible public telephone line for incoming calls and ensure that staff are trained in responding to TTY calls. Any TTY line should be answered by a live person during hours when voice calls from the public are also answered by a live person and availability of the TTY line should be promoted in phone books and any material advertising station contact information.

o. Ensure that voice menus for incoming calls are TTY- and Virginia Relay-friendly. Pacing of voice menus needs to be set so that consumers who are deaf can process and respond to the prompts.

VII. Best Practices for Consumers

- **a.** Establish a positive working relationship with local broadcasters by encouraging the development of and then participating in a Deaf and Hard of Hearing Consumer Advisory Group hosted by broadcasters.
- **b.** Approach broadcasters to request station tours, Open House events, and other joint activities designed to strengthen awareness and involvement of broadcasters and the community.
- **c.** Identify a single consumer and backup(s) in the community to serve as the Community to Broadcaster Liaison (CBL). This CBL should be able to represent the needs and concerns of a wide range of consumers in a positive and productive manner.
    - **i.** The CBL and backup(s) will have direct contact access to the BCL to ensure that immediate problems are addressed.
    - **ii.** The CBL and the BCL should agree to and follow procedures for working together to resolve problems as quickly as possible.
    - **iii.** The CBL should report back to the local deaf and hard of hearing communities on the resolution of issues raised with the BCL.
- **d.** All consumers are encouraged to contact broadcasters through regular public contact numbers provided to the general public with general concerns and complaints. Nothing in these Best Practices, including the role of the Community to Broadcaster Liaison, is intended to discourage consumers from contacting broadcasters directly.
- **e.** Plan and participate in community workshops for consumers and broadcasters on topics related to access to information during emergency situations.
- **f.** Address complaints with the broadcaster first.
    - **i.** Complaints to the broadcaster should be specific as to the time of the broadcast involved and the problem that prompted the complaint, including a description of the type of information the consumer expected to be presented in a visual format in the situation but which was not displayed. For example, in a major fire in a metropolitan area, consumers might expect a visual display of street closings and evacuation areas. If such details are not displayed visually, the consumer should point that out to the broadcaster.
    - **ii.** Be prepared to offer suggestions for resolution.
- **g.** If an acceptable solution/resolution cannot be reached with the broadcaster and a consumer proceeds with filing a formal complaint with the FCC, follow the FCC Guidelines for filing a complaint.

VIII. Best Practices for the Virginia Department for the Deaf and Hard of Hearing

a. Work with Virginia Department of Emergency Management to ensure that any central source of information for broadcasters to use in preparing to report critical details in advance of or during an emergency situation includes:
   i. Information on TTY numbers for appropriate contacts, such as electric companies, and the Red Cross, information on how to secure interpreter services, information on Virginia Relay, and other information that may be of assistance to broadcasters in providing critical details to persons who are deaf or hard of hearing.

b. Assist broadcasters and consumers in establishing local Deaf and Hard of Hearing Consumer Advisory Groups.

c. Provide information to consumers to assist in preparing for and responding to emergencies and to assist in making informal and formal complaints about communications access in emergency situations.
   i. Offer community workshops on related topics.
   ii. Provide related information on the VDDHH web site.

d. Provide Outreach and TTY Technical Assistance to broadcasters on request and as needed.

IX. Resources

a. Federal Communications Commission Documents Related to the Emergency Captioning Rule

i. **FCC Consumer Facts: Accessibility of Emergency Video Programming to Persons with Hearing and Visual Disabilities (URL: http://www.fcc.gov/cgb/consumerfacts/emergencyvideo.html)**

ii. **FCC Orders Increased Accessibility of Video Programming to Viewers with Hearing Disabilities Adopted April 13, 2000 and Released April 14, 2000. (Emergency Closed Captioning) (URL: http://www.fcc.gov/Bureaus/Cable/Orders/2000/fcc00136.txt)**

iii. **Public Notice Dated 8/13/01 Reminding Video Programming Distributors of Obligation to Make Emergency Information Accessible to Persons With Hearing Disabilities. (URL: http://www.fcc.gov/cgb/dro/reminder.pdf)**

iv. **Public Notice Released on July 31, 2002, as a Reminder to Video Programming Distributors of Obligation to Make Emergency Information Accessible to Persons With Hearing or Vision Disabilities. (URL: http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-02-1852A1.pdf)**

v. **The Consumer & Governmental Affairs Bureau Reminds Video Programming Distributors of Obligation to Make Emergency Information Accessible to Persons with Hearing or Vision Disabilities in a Public Notice Released July 18, 2003. (URL: http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-03-2361A1.pdf)**

vi. **FCC Reminds Video Programming Distributors They Must Make Emergency Information Accessible to Persons with Hearing or Vision Disabilities – May 28, 2004 (URL: http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-247810A1.doc)**

b. Federal Communications Commission Document Related to Filing a Complaint

i. **Filing A Complaint with the FCC is EASY! (URL: http://www.fcc.gov/cgb/complaints.html)**

ii. **Additional Suggestions for Preparing a formal complaint from consumers and the FCC:**

Be specific: "Station X interrupted programming with a news bulletin about a chemical spill. They did not provide a visual display of information related to the location of the spill, the possible dangers to residents, alternate routes, or when the road was expected to re-open."

If possible, include a videotape of the segment involved in the complaint. The FCC can review the video and compare what the reporters are saying with what is visually displayed.

Be willing to follow up on the complaint. Many times, the FCC tries to work with consumers to follow up on complaints, but the consumers do not want to continue. The FCC may not continue to investigate the complaint if the consumer does not provide additional information when requested.

Details are the most important part of a formal complaint. Report the date, the time and the station information. Also include the specifics of the complaint. It is not enough to say, "Station X did not caption the news alert today."

c. National Association of the Deaf Documents Related to Emergency Captioning

i. **FCC Emergency Captioning Rules Violated by Television Stations (URL: http://www.nad.org/infocenter/newsroom/nadnews/FCCCaptionRulesViolated.html)**

ii. **Emergency Warnings: Notification of Deaf or Hard of Hearing People (URL:**

http://www.nad.org/infocenter/infotogo/emergency/EmergencyNotification.html)

iii. **How to File A Captioning Complaint (URL: http://www.nad.org/infocenter/infotogo/tech/captioncomplaint.html)**

iv. Visual Announcements of Emergency Information by Television Broadcasters (URL: http://www.nad.org/infocenter/infotogo/legal/TVemergencybroadcast.html

d. **Captioning Resources**

i. **National Court Reporters Association Online Community for Captioning Providers, includes links to directories of caption providers. (URL: http://www.ncraonline.org/captioning/)**

ii. **CARTWHEEL Network of Caption Services. (URL: http://www.cartwheel.cc/)**

iii. **Telecommunications For the Deaf, Inc. Closed Caption Information (URL: http://www.tdi-online.org/tdi/ClosedCaptionService.asp)**

iv. **Sample Proposal for Real Time Captioning for Emergency Broadcasts (Hard copy attached)**

e. **Consumer Resources**

i. **Nielsen Media Research Listing of Designated Market Areas (rankings of television markets in the United States (URL: www.neilsenmedia.com – Select "FAQ" and then select "What is a DMA and how do you determine this?" (URL: http://www.nielsenmedia.com/FAQ/dma_satellite%20service.htm#What is a DMA and how do you determine this?) NOTE: Virginia has one top 25 broadcast market – Northern Virginia is included in the Washington, D.C. Designated Market Area.**

Emergency Captioning Work Group
Consumer Feedback for the "Best Practices Guide"
To be submitted to the Virginia Association of Broadcasters

Issue #1: Key elements for visually accessible emergency information.
Consumers who are Deaf/Hard of Hearing/DeafBlind/Late Deafened (hereafter referred to as "consumers") recommend that local TV stations provide:

1. Realtime captioning of emergency information
~ Word-for-word text of all word**s** spoken on audio
~ Time synchronization so that the text appears with no more than a 2-second delay after words have been spoken
~ Accuracy rate of 100% as a goal to ensure key information is understood
~ No cutting off text which has not yet appeared when switching to a commercial or other program
~ Text is not superimposed over regular program captioning or other key information on the screen

2. Self - monitoring for quality
Captioned broadcasts are constantly monitored by a staff member to ensure that **they are** being transmitted clearly and accurately.

3. Accessible phone/TTY line to report any problems
~ A separate phone number that is TTY accessible and does not require going through a voice menu system
~ Phone staffed 24 hours a day, 7 days a week or during the station's hours of transmission by someone with authority or expertise to get problems solved
~ Phone number advertised for this purpose in phone book, on website; information sent to deaf and hard of hearing community organizations

4. **Collaboration between TV stations and the consumers**
Local TV stations and consumers form partnerships to open dialogue, exchange information, discuss technology, troubleshoot and improve accessibility.

Issue #2: Types of situations are considered "emergencies" for which consumers need coverage:

~ **Inclement weather:** hurricanes, snow, ice, blizzards, floods, dangerous lightning, tropical storms, hail, heat waves, drastic temperature drops, droughts, mudslides, sinkholes, air quality alerts (e.g., smog).

~ **Natural disasters** e.g. earthquakes

~ **Biohazards/hazardous materials**: chemical spills, nuclear energy

accidents, gas spills, oil spills, water contamination

~ **Fires** e.g. wildfires, fires in business and residential areas

~ **Homeland Security**: acts of terrorism, wars, new security measures and changes to policies and procedures, hostage situations

~ **Transportation accidents**: e.g. planes, trains, boats, cars, and subways

~ **Health-related threats:** e.g. anthrax, smallpox, rabies, SARS

~ **Criminal activity:** any series of rapes, arson, murders, break-ins, thefts; prison escapes**,** riots, looting.

~ **Miscellaneous**: threats from dangerous, wild animals on the loose, solar activity.

Issue #3: Types of information following emergencies that are needed by consumers:

NOTE: The following are examples and are not intended to be a comprehensive list.

Evacuations: Are our areas being evacuated? When can we return to our homes?

Water: Is it safe to drink? Where can we get bottled water, ice, and/ or dry ice?

Power outages: When will electricity be restored? Who do we call to report downed power lines?

Emergency shelters: Where are the shelters located? Which shelters have sign language interpreters and other types of communication access?

Road/Bridge closings: Which routes are closed? Where are the alternative routes? Which airports, train stations, subways, etc. are closed or delayed? When will they re-open, and what will their hours be?

School closings and delays

Ozone alerts: Is it safe to go outside? What do the different codes mean?

Law enforcement information about crimes and crime prevention:
~Where the crimes tend to occur?

~ What time of the day are the crimes occurring?
~Who is being targeted?
~Is there a particular suspect or vehicle to look for?
~How can we protect our families, our homes and ourselves

Issue #4: Types of broadcasts potentially containing emergency information that stations should be ready to cover:

~ Regular news broadcasts
~ Special reports
~ Newsbreaks that interrupt a program or are during commercial breaks

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Compiled by Virginia Emergency Captioning Work Group, Consumer Committee: Rhonda Jeter, Brenda Carper, Vic Matsui, Bennie Lacks, Ronald Lanier and Cheryl Heppner, with input from various consumers and organizations.

November-December 2003

Providing Quality Captioning Services

REAL-TIME CAPTIONING
For EMERGENCY BROADCASTS

CONTRACT OPTIONS FOR TELEVISION STATIONS	RETAINER FEE FOR 24/7 PAGER SERVICE	HOURLY RATE FOR REAL-TIME CAPTIONING	HOURLY RATE FOR EMERGENCY CAPTIONING
A station contracts to provide real-time captioning for a minimum of five (5) 30-minute newscasts per week	None--24/7 pager service is provided for no additional charge.	$105-$130 per hour. Cost decreases as number of contracted hours increases.	Same rate as the newscast captioning rate ($105-$130/hr). The station will receive priority when needing emergency captioning.
A station contracts for no real-time captioning on a regular basis but wants guaranteed and/or priority availability of emergency real-time captioning services	$1,000 per year--This fee includes the cost of testing, captioner prep, 24/7 pager call and 4 hours of emergency captioning each year. CSK guarantees availability for first 4 hours of emergency captioning per year. Additional hours are provided on an as-available, basis, although CSK does not anticipate a problem with coverage for these additional hours. The 4 hours must be used within the 12-month contract period or they are forfeited.	N/A	$175.00 per hour for each hour over the original 4 hours included in the annual fee.

--In order to be able to provide real-time captioning in any of the scenarios above, a station must provide a compatible closed-caption encoder with built-in modem (EEG or LINK) and two dedicated toll-free telephone lines, one of which would allow the captioner to automatically connect to the program audio and the other would automatically connect the captioner to the encoder modem**.**

--Real-time Captioning of broadcasts of emergencies and late-breaking stories is billed with a one-hour minimum and then in 30-minute increments thereafter each time XXX is requested to caption an emergency or late-breaking story.

--If toll-free lines are not available to our captioners, the station will be billed at a rate of $10.00 per phone line per hour for long-distance charges.